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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,767	01/30/2002	Nabil M. Lawandy	902.0025.U1(US)	8217
29683	7590	03/01/2004	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			JOERGER, KAITLIN S	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/060,767

Applicant(s)

LAWANDY ET AL.

Examiner

Kaitlin S Joerger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 30,31 and 40-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 69-72 is/are allowed.
- 6) ☐ Claim(s) 30,31,40-45,47,48,50-60 and 62-65 is/are rejected.
- 7) ☐ Claim(s) 46,49,61 and 66-68 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6, 7, 11.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 59 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner is unclear as to what the applicant means by "laser-like action". That phrase does not clearly define what feature that the applicant is claiming.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30, 31, rejected under 35 U.S.C. 103(a) as being unpatentable over Agnew et al. in view of Sawano et al.

Agnew teaches a method for processing mail, comprising: providing a mail piece for sorting that requires marking; identifying an address to which the mail piece is going to be delivered; encoding address information for the mail piece; marking the mail piece with an indicia comprising the encoded address information, see claims 1-13. Agnew further teaches

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that the information recorded in the indicia is detected and interpreted and passed on to a mail sorting system.

Agnew does not, however, teach the step of affixing a layer or material onto said mail piece on which the marking is affixed. Sawano does teach such a layer that can be affixed to recording media of various forms including cards and sheets. Sawano teaches a layer that is transparent or substantially transparent in a non-stimulated state and that becomes reversibly non-transparent upon the application of a stimulus, see columns 2 and 3.

It would have been obvious to one of ordinary skill in the art to use the layer of Sawano in the mail processing method of Agnew if one desired to shield the barcode on the mailpiece from background interference caused by multi-colored envelopes.

Claims 40-42 44, 45, 50, 51, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnew in view of Sawano as applied to claim 30 above, and further in view of Sawano.

Sawano further teaches that the layer is a polymer material where the material is transparent below a lower critical solution temperature and non-transparent above the lower critical solution temperature. The layer of Sawano is also both a photochromic and thermochromic material as it changes color as a result of being exposed to both light and heat. The material of Sawano's layer is further defined to be blended with a substance so that the material optically contrasts as a result of an application of a thermal stimulus and wherein the layer also comprises an optical phase change material that responds to a change in ambient

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temperature. The layer of Sawano is taught to be coated onto the substrate, where coated is taken to be either of the claimed application methods, including painting, spraying and rolling.

Claims 52-54, 62 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnew in view of Sawano as applied to claim 30 above, and further in view of Agnew.

Agnew further teaches both an indicia, which comprises a sort code, that is printed in fluorescent ink and indicia that is printed in visible ink, or more generally he teaches an indicia that comprises at least one optically readable data form. The indicia of Agnew is further taught to be printed by a method of impact printing, see column 7, lines 15+.

Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agnew in view of Sawano as applied to claim 30 above, and further in view of Kroner et al.

Kroner teaches a layer that comprises hydroxypropyl cellulose and water in a micro encapsulated form and with a curable polymer constituent material to create a gel or a solid.

It would have been obvious to use the layer material of Kroner in order to ensure that the layer changed into a uniformly optically contrasting background when it was heated above the LCST.

Claims 43, 55-58, 60, and 63 rejected under 35 U.S.C. 103(a) as being unpatentable over Agnew in view of Sawano as applied to claim 30 above, and further in view of Goto.

Goto teaches a layer and indicia that comprise a materials that are optically contrasting to each other at one or more wavelengths. He further teaches that the indicia is a polymer mixture

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that is transparent in a non-stimulated state and becomes non-transparent in a stimulated state and that it comprises a photochromic and thermochromic material. Lastly he teaches that the stimulus comprises UV light.

*Allowable Subject Matter*

Claim 69-72 are allowed.

The independent claim 69 defines a mail processing system similar to the mail processing system of claim 30 with a more specifically defined layer system. Claim 69 defines two layers which, the first of which optically contrasts a mailpiece it is affixed to upon application of a stimulus, the second of which optically contrasts the first layer in response to a second stimulus. In addition, it defines two indicia, one on the first layer, one on the second. The examiner was unable to find such a layering and marking system as defined by claim 69 among the prior art, and therefore has determined the claim to be both novel and non-obvious.

Claims 46, 49, 61, and 66-68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

49 and 61 both define the use of a Lewis acid and a color former introduced into a polymer. This feature was not found among the prior art after an extensive search by the examiner, and therefore is determined to be both novel and non-obvious.

Claim 66 defines a two-layered marking system which was not taught or disclosed in the prior art, and therefore was found to be both novel and non-obvious.


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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S Joerger whose telephone number is 703-305-8503. The examiner can normally be reached on Monday - Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksj  
  
24 February 2004

DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
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